

603

CENTRAL INTELLIGENCE AGENCY
INFORMATION REPORT

COUNTRY

USSR

DATE DISTR. 29 Jul 1954

25X1

SUBJECT

Geologic Studies and Research

NO. OF PAGES 3

PLACE
ACQUIREDNO. OF ENCLS.
(LISTED BELOW)DATE
ACQUIREDSUPPLEMENT TO
REPORT NO.

25X1

DATE OF INFO

THIS DOCUMENT CONTAINS INFORMATION AFFECTING THE NATIONAL DEFENSE OF THE UNITED STATES, WITHIN THE MEANING OF TITLE 18, SECTIONS 793 AND 794, OF THE U.S. CODE, AS AMENDED. ITS TRANSMISSION OR REVELATION OF ITS CONTENTS TO OR RECEIPT BY AN UNAUTHORIZED PERSON IS PROHIBITED BY LAW. THE REPRODUCTION OF THIS FORM IS PROHIBITED.

THIS IS UNEVALUATED INFORMATION

25X1

Soviet geologic regional studies have been very numerous since World War II. This activity has aimed at the development of heavy industry and especially at the preparation of a mineral basis for that industry. Surveys of geologic structure and useful minerals have been conducted in the old industrial regions of the Donets Basin, Krivoi Rog, and the Second Baku Oil Fields, the old Baku Oil Fields, the North Caucasus, the Ural Mountains, the Kuznetsk Basin, and Pre-Baikalia (the area west of Lake Baikal). In addition, the USSR has sent geologic expeditions into the Asiatic USSR, especially into North Siberia, East Siberia, the Middle Asiatic regions, and the Far East. In these enormous areas, hundreds of geologic and industrial research parties made up of geodesists, engineers, technicians, etc. are engaged in preparing the way for exploitation of mineral resources.

25X1

2. The Soviets are exploring for oil fields in the Chatanga /Khatanga 71 58N-102 30E/ region of the Lena River Basin, and have discovered new oil fields in the Yakutsk region. Geologic research has been organized in the Kamchatka and Chukotski Peninsulas and in North Sakhalin. Searches are being conducted for gas fields in the Pre-Urals (West of the Urals) and in the Saratov /51 34N-46 02E/ district on the Volga River; for metallic minerals in Middle Asia, Pre-Baikalia, and East Siberia (the Cherski Mountains, and the Aldan and Kolyma districts); and for uranium minerals in Pre-Baikalia, near Mongolia in the Buryat-Mongolskaya ASSR, and in the Kola /68 52N-33 00E/ district of the Ukraine.

25X1

CLASSIFICATION

CONFIDENTIAL

DISTRIBUTION

ORR EV

25 YEAR RE-REVIEW

CONFIDENTIAL/US OFFICIALS ONLY

25X1

- 2 -

The uranium search in the Buryat-Mongolskaya ASSR has been conducted under the guise of studying fossil animals (see the Paleontological Report, Efremov, in the Journal Priroda, 1953). Special attention is being directed towards the search for titanium minerals in bauxite, and in products of the weathering of crystalline rocks. There are many research parties seeking rare metals in the Asiatic part of the USSR.

3. The plan of the Soviet Academy of Sciences in Moscow directs studies of geographic conditions and geologic resources in all countries bordering on the USSR, especially the Asiatic countries. The European Satellites have come in for some attention, too. The Soviets have been interested in iron and zinc ore deposits in Poland, oil field research in Rumania, and special uranium ore research in Poland (Lower Silesia) and East Germany (Aue, Saxony 50 35N-12 42 E). All Polish geologic, geographic and other scientific literature must have résumés or abstracts in Russian to relieve Soviet scientists of the necessity of reading foreign literature.
4. The Soviets are greatly interested in foreign geologic literature and it is interesting to note that Academician Professor AE Fersman, the most famous Soviet mineralogist, was the one who in 1944 prepared the special monograph, "The Mineral Resources of the USA." In the Bolshaya Sovetskaya Encyclopedia, 1952, 1953, there is exact data concerning the mineral resources and production of such places as Colombia, the Belgian Congo (uranium production in 1950) and the United States. Special geographic journals have published exact descriptions of Algeria as a result of Soviet attendance at the International Geological Congress in 1952. The journal Vokrug Svieta for 1952-1953 gives numerous descriptions of American countries.
5. According to the Academy of Sciences in Moscow, the most recent and important theme in connection with exploration for oil and gas deposits is the study of the conditions of formation and origin of such deposits. Most attention in the theoretical and practical aspects of the work is directed to the Ukraine (the Dnieper-Donets Basin-possible oil bearing shale), the 2d Baku oil fields, the North Siberian district, and North Sakhalin. Soviet geologists are exploring the Middle Volga region for oil shale deposits and research in the complex exploitation of oil shales is being conducted in Estonian deposits. In addition, paleontologic research concerning micro-fauna in oil bearing strata is being performed. New developments in this field include geophysical seismic research methods, and the study of oil structures such as salt domes. New deposits of oil and gas have been discovered in the Caspian and Azov Seas associated with mud volcanoes. The presence of these mud volcanoes is considered by the Soviets to be a positive indication of the presence of oil. The volcanoes are found on the Apsheron Peninsula and in the Kertsch Novorossisk region.
6. Another important research project concerns the weathering of old physical structures such as the Ural Mountains. SS Smirnov and Savaritskiy have written about this in connection with the possibility of discovering new deposits of nickel, cobalt, beryllium, and rare elements.
7. Study of the geology of the sea has been publicized by the textbook, Geology of the Sea, MV Klenova, Moscow, 1948, and by Senkovitch's Zenkevitch, I.A. Dynamics and Morphology of the Sea Coasts, Moscow, 1946. Soviet geologists have a new directive to study the sediments of the sea bottom, beach erosion, and submarine mountain ranges.

CONFIDENTIAL/US OFFICIALS ONLY

25 YEAR RE-REVIEW

CONFIDENTIAL/US OFFICIALS ONLY

- 3 -

25X1

8. The problems of glaciology, glaciers, and ice structure are discussed by SV Kolesnik, General Glaciology, Leningrad, 1939 and 1949. The question of permafrost (merslota vechnyaya) in connection with transportation and railroad building in North Siberia is treated by M Sumgin, Merslotovedeniye, Moscow, 1948.
9. Geotectonic research is a recent area of study of the Moscow Academy of Science. VV Belousov's General Geotectonic, Moscow, 1948, concerns his radioimmigration theory. This explains the origin of mountains as a result of thermal energy created by the disintegration of radioactive substances within the earth's crust. An earlier work is MM Tetiaev's The Principle of Geotectonic, Moscow, 1941.

25X1

25X1

CONFIDENTIAL/US OFFICIALS ONLY